

### ABSTRACT

The present invention provides an apparatus and method for preventing damage to a system due to runaway current and provides for the reactivation of the system . The shutdown and reactivation method and apparatus includes a driving circuit which supplies an output current to a load. If a runaway current condition occurs in the system the shutdown and reactivation apparatus is activated by triggering a shutdown signal which deactivates the driving circuit such that the output current is no longer supplied to the load. The shutdown signal activates a charging circuit, which supplies a charging current to the load. A first monitoring circuit is coupled with the load, and configured to monitor an output voltage across the load when the shutdown and reactivation apparatus is in the active state. The first monitoring circuit signals the shutdown and reactivation apparatus to transition to a deactivated state when the output voltage is at least equal to a predefined voltage threshold, and further the first monitoring circuit signals the driving circuit to again begin to supply the output current to the load.